

WHAT IS CLAIMED IS:

1 *Sub* A method of providing quality of service in an Internet Protocol (IP) telephony session
2 between a calling party and a called party, which comprises the steps of:

3 transporting IP media for said session between said calling party and a first device having IP
4 capability and ATM capability;

5 transporting IP media for said session between said called party and a second device having IP
6 capability and ATM capability; and

7 establishing an ATM virtual circuit for said session between said first device and said second
8 device.

1 2. The method as claimed in claim 1, wherein said first and second devices are routers.

10 3. The method as claimed in claim 1, wherein:

11 said first device is identified by a temporary session IP proxy address for said called party; and
12 said second device is identified by a temporary session IP proxy address for said calling party.

13 4. The method as claimed in claim 1, wherein said step of establishing an ATM virtual circuit
14 between said first and second devices comprises the steps of:

15 assigning a calling party number for said session at said first device; and

16 assigning a called party number for said session at said second device.

1 *Sub* A method of providing quality of service in an IP telephony session between a calling party and
2 a called party, which comprises the steps of:

3 assigning a temporary IP proxy address for said called party for said session at a first access
4 control manager;

5 assigning a temporary IP proxy address for said calling party for said session at a second access
6 control manager; and

7 establishing a switched virtual circuit for said session between said first access control manager
8 and said second access control manager.

1 6. The method as claimed in claim 5, wherein said step of establishing said virtual circuit
2 comprises the steps of:
3 assigning a temporary calling party address for said session at said first access control manager;
4 and
5 assigning a temporary called party address for said session at said first access control manager.

1 7. The method as claimed in claim 6, wherein said step of assigning a temporary calling party
2 address comprises the step of selecting a calling party address from a pool of calling party addresses
3 allocated to said first access manager.

1 8. The method as claimed in claim 6, wherein said step of assigning a temporary called party
2 address comprises the step of selecting a called party address from a pool of called party addresses
3 allocated to said second access manager.

1 9. The method as claimed in claim 5, further comprising the steps of:
2 routing IP media traffic from said calling party to said called party IP proxy address at said first
3 access control manager; and
4 routing IP media traffic from said called party to said calling party IP proxy address at said
5 second access control manager.

1 10. The method as claimed in claim 9, further comprising the steps of:
2 translating IP media traffic received at said called party IP proxy address to ATM traffic for
3 transport through said virtual circuit from said first access control manager to said second access
4 control manager; and
5 translating IP media traffic received at said calling party IP proxy address to ATM traffic for
6 transport through said virtual circuit from said second access control manager to said first access
7 control manager.

11. The method as claimed in claim 10, further comprising the steps of:
translating ATM traffic received at said temporary called party address to IP media traffic for transport to said called party; and
translating ATM traffic received at said temporary calling party address to IP media traffic for transport to said calling party.

Sub
A method of providing quality of service in an IP telephony session between a calling party and a called party, which comprises the steps of:

assigning a temporary IP proxy address for said called party for said session at a first access control manager;

assigning a temporary IP proxy address for said calling party for said session a second access control manager;

assigning a temporary second network calling party address for said session at said first access control manager; and

assigning a temporary second network called party address for said session at said first access control manager.

13. The method as claimed in claim 12, wherein said step of assigning a temporary second network calling party address comprises the step of selecting a calling party address from a pool of second network calling party addresses allocated to said first access manager.

14. The method as claimed in claim 12, wherein said step of assigning a temporary second network called party address comprises the step of selecting a called party address from a pool of second network called party addresses allocated to said second access manager.

15. The method as claimed in claim 12, further comprising the steps of:
routing IP media traffic from said calling party to said called party IP proxy address at said first access control manager; and
routing IP media traffic from said called party to said calling party IP proxy address at said second access control manager.

1 16. The method as claimed in claim 15, wherein:
2 said second network includes an ATM network;
3 said temporary second network calling party address includes a temporary calling party
4 number; and
5 said temporary second network called party address includes a temporary called party number.

1 17. The method as claimed in claim 16, further comprising the step of establishing a switched
2 virtual connection through said ATM network between said temporary called party number and said
3 temporary calling party number.

1 18. The method as claimed in claim 17, further comprising the steps of:
2 translating IP media traffic received at said called party IP proxy address to ATM traffic for
3 transport through said virtual circuit from said first access control manager to said second access
4 control manager; and
5 translating IP media traffic received at said calling party IP proxy address to ATM traffic for
6 transport through said virtual circuit from said second access control manager to said first access
7 control manager.

1 19. The method as claimed in claim 17, further comprising the steps of:
2 translating ATM traffic received at said temporary called party number to IP media traffic for
3 transport to said called party; and
4 translating ATM traffic received at said temporary calling party number to IP media traffic for
5 transport to said calling party.

Sub 201
1 A system for providing a quality of service IP telephony session between a calling party and a
2 called party, which comprises:

3 an IP network, said IP network providing IP access to the calling party and to the called party;

4 an ATM network;

5 a first device connected between said IP network and said ATM network, said first device
6 providing bidirectional translation between IP media traffic and ATM traffic;

7 a second device connected between said IP network and said ATM network, said second
8 device providing bidirectional translation between ATM traffic and IP media traffic; and

9 an intelligent control layer for establishing a virtual circuit through said ATM network for an IP
10 telephony session between the calling party and the called party.

1 21. The system as claimed in claim 20, wherein:

2 said first device is operably connected to an ingress switch of said ATM network; and

3 said second device is operably connected to an egress switch of said ATM network.

4 22. The system as claimed in claim 20, wherein said intelligent control layer comprises:

5 an ATM intelligent controller, said ATM intelligent controller providing session setup signaling
6 to said first and second devices; and

7 an IP intelligent controller, said IP intelligent controller providing call setup signaling to said
8 ATM intelligent controller.

9 23. The system as claimed in claim 20, wherein in said first and second devices each comprise a
10 router.

Sub 201
1 The system as claimed in claim 20, wherein said intelligent control means comprises:

2 means for assigning a temporary IP session proxy address for said called party at said first
3 device; and

4 means for assigning a temporary IP session proxy address for said calling party at said second
5 device.